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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,005	06/23/2006	Yuunosuke Nakahara	8068-1010	1276
466 7590 01/13/2009 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER DARJI, PRITESH D	
			ART UNIT 4181	PAPER NUMBER
			MAIL DATE 01/13/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/553,005

**Applicant(s)**

NAKAHARA ET AL.

**Examiner**

PRITESH DARJI

**Art Unit**

4181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 12/31/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 15, 19, 25 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 15, 19, 25 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date 10/11/2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Application***

The amendment of application was received on 12/31/2008. Claims 11, 15, 19, 25 and 29 are pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "the inorganic refractory oxide" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. In view of this, a proper search could not be conducted since the examiner is unclear as to the metes and bounds of the claim. It is to be noted that all claims drawn to a supported catalyst have been restricted out and non elected without traverse and canceled by applicants.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 15, 19 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung et al. (Electric conduction behavior, room temperature).

Regarding claim 11, 15 and 19, Jung et al. teaches a specimen based on the tetragonal structure of  $\text{Ca}_2\text{MnO}_4$  (See page 2, column 1, lines 22-30). Jung et al. further describes to have platinum paste as a coating on the specimen (See page 2, column 2, lines 8-10).

In view of this, the claimed invention is anticipated by the reference because the reference teaches an article which comprises all of the claimed components ( $\text{Ca}_2\text{MnO}_4$  coated with platinum).

With respect to the limitation "exhaust gas cleaning catalyst", although not literally defined by the reference, this can be construed as a preamble limitation and a preamble limitation is of no consequence when a composition (article) is the same. Ultimate intended utility does not make a composition patentable. See *In re Pearson*, 181 U.S.P.Q. 641

In addition, the examiner acknowledges that the reference is not literally directed to a catalyst, however, applicants are claiming a "material" which the intended use does not carry any weight to the composition (see *In re Thuau* 57 USPQ 324 (CCPA 1942). Any material possesses a property such that it may be used for a purpose. In addition, irrespective of what the material is called, the material is the same, thus no distinction is seen to exist.

In addition and as in the case of claim 29, it is to be noted that applicants use process limitations to define the product and "product-by-process" claims do not patentably distinguish the product even though made by a different process. *In re Thorpe* 227 USPQ 964. "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (MPEP 2111.03)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following rejection is an alternative rejection to the one defined above assuming *arguendo* about the catalyst limitation.

Claims 11, 15, 19 and 29 are rejected under 35 U.S.C. 103(a) as being obvious over Jung et al. (Electric conduction behavior, room temperature) in view of Choudhary (US 6197719)

Jung doesn't expressly teach if component  $\text{Ca}_2\text{MnO}_4$  is a catalyst. However, in a process for the activation of perovskite type oxide, Choudhary teaches perovskite oxide can be represented by formula  $[\text{A.sub.(1-a)} \text{A}^*. \text{sub.a}]) \cdot \text{sub.n} \text{BO.sub.x}]$ . Substituting  $a=1$ ,  $x=4$ ,  $n=2$ ,  $\text{A}^* = \text{Ca}$  and  $\text{B} = \text{Mn}$ , we would get  $\text{Ca}_2\text{MnO}_4$  perovskite oxide (See column 12, claim 1). At the time of invention it would have been obvious to a person of ordinary skill in the art to use the composition of Jung as a catalyst in view of the teaching of Choudhary. The suggestion or motivation for doing is because Choudhary teaches in column 4, lines 46-47 that perovskite oxides based on the above formula are known to be used with or without catalyst carrier (i.e. if the oxides are combined with a carrier to form a catalyst, the oxides themselves must have catalytic properties thus they also are catalysts). In view of this, a person having ordinary skills in the art would have appreciated that the material disclosed by Jung can be used as a catalytic material absent evidence to the contrary.

In addition and as in the case of claim 29, it is to be noted that applicants use process limitations to define the product and "product-by-process" claims do not patentably distinguish the product even though made by a different process. *In re Thorpe* 227 USPQ 964. "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (MPEP 2111.03)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRITESH DARJI whose telephone number is (571)270-5855. The examiner can normally be reached on Monday to Thursday 8:00AM EST to 6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL MARCHESCHI/  
Primary Examiner, Art Unit 1793

/P. D./  
Examiner, Art Unit 4181

